



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Fumihiro ARAKAWA et al.

Serial No.: 09/804,081

Filed: March 13, 2001

For: ANTIREFLECTION FILM

PRELIMINARY AMENDMENT

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to examination of the above-identified application,  
please enter the following specification changes as noted below:

IN THE CLAIMS:

Please amend claims 6 and 7 as follows:

6. (Amended) A polarizing element comprising: a polarizing plate; and, stacked on the polarizing plate, the antireflection film according to claim 1.

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7. (Amended) A display device comprising: a display section; and, stacked or disposed on the display section in its viewer side, the antireflection film according to claim 1.

Please add new claim 12 below:

12. (New) A display device comprising: a display section; and, stacked or disposed on the display section in its viewer side, the polarizing element according to claim 6.

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REMARKS

Claims 1-12, as amended, remain herein. Claims 6 and 7 have been amended hereby and new claim 12 added.

This Preliminary Amendment is submitted to eliminate multiply dependent claims from the above-identified application.

Examination of this application on its merits is respectfully requested.

Respectfully submitted,  
PARKHURST & WENDEL, L.L.P.

July 17, 2001  
Date

  
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Attachment:  
Mark Up of Amended Claims

RWP/ame

Attorney Docket No. DAIN:580

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CLAIMS

1. An antireflection film comprising: a transparent layer formed of a cured product of an ionizing radiation-curable resin composition; and a concave-convex portion provided on one side of the transparent layer, the concave-convex portion comprising fine concaves and convexes provided at a pitch of not more than the wavelength of light.
2. The antireflection film according to claim 1, wherein the transparent layer is backed by a transparent substrate film.
3. The antireflection film according to claim 1, wherein the transparent layer has a surface hardness of not less than H in terms of pencil hardness.
4. The antireflection film according to claim 1, which further comprises, provided on the concaves and convexes, a layer formed of a resin composition having lower light refractive index than the transparent layer.
5. The antireflection film according to claim 1, which has antistatic properties.
6. A polarizing element comprising: a polarizing plate; and, stacked on the polarizing plate, the antireflection film according to any one of claims 1 to 5 claim 1.
7. A display device comprising: a display section; and, stacked or disposed on the display section in its viewer side, the antireflection film according to any one of claims 1 to 5 or the polarizing element according to claim 6 claim 1.
8. A process for producing an antireflection film, comprising the steps of: providing a mold with an uneven surface having fine concaves and convexes at a pitch of not more than the wavelength of light; applying, onto the mold, an ionizing radiation-curable resin composition in an amount large enough to at least fill the concaves of the mold surface; after the application of the ionizing radiation-curable resin composition, covering the top of the applied resin composition with a transparent substrate film; after covering, curing the ionizing radiation-curable resin composition located between the transparent substrate film and the mold to produce a cured product of the ionizing radiation-curable resin composition;

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